

REMARKS

This is a full and timely response to the Office Action mailed June 8, 2010, submitted concurrently with a Notice of Appeal and a two month extension of time to extend the due date for response to November 8, 2010.

By this Amendment, claim 1 has been amended to more particularly define the present invention. Thus, claims 1-21 are currently pending in this application, with claim 21 being withdrawn. Support for the claim amendments can be readily found variously throughout the specification and the original claims. No new matter has been added.

In view of these amendments, Applicant believes that all pending claims are in condition for allowance. Reexamination and reconsideration in light of the above amendments and the following remarks is respectfully requested.

Rejection under 35 U.S.C. §103

Claims 1-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kameda et al. (U.S. Patent No. 5,923,018) in view of White et al. (U.S. Patent Application Publication No. 2004/0019501 A1). Applicant respectfully traverses this rejection.

To establish an obviousness rejection under 35 U.S.C. §103(a), four factual inquiries must be examined. The four factual inquiries include (a) determining the scope and contents of the prior art; (b) ascertaining the differences between the prior art and the claims in issue; (c) resolving the level of ordinary skill in the pertinent art; and (d) evaluating evidence of secondary consideration. *Graham v. John Deere*, 383 U.S. 1, 17-18 (1966). In view of these four factors, the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and should "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385, 1396 (2007). Further, the Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Finally, even if the prior art may be combined, there must be a reasonable expectation of success, and the reference or

references, when combined, must disclose or suggest all of the claim limitations. *See in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Here, in this case, Applicant submits that the Examiner has failed to establish a *prima facie* case of obviousness because the combined prior art of record fails to disclose or suggest all of the claim limitations with particular emphasis on the limitations, “*a function for creating an examination schedule to avoid overlapping in time between timing of the medication for a certain patient and timing of medication for other patients and between timing of examination for the certain patient and timing of examination for the other patients, based on said information on contents of the examination and an order of examination and the waiting time.*”

The Examiner insists that because the system and method of Kameda et al. is computer-implemented, it meets the limitations of the present claims. In other words, it appears that the Examiner believes that the current claim language does not exclude a system in which an operator performs certain functions utilizing a graphical user interface (see pages 7-8 of the Office Action). The Examiner makes similar arguments with regard to the teachings of White et al. (see pages 9-10 of the Office Action). Applicant disagrees. Claim 1 recites, “*A single nuclear medical examination scheduling program stored in a computer memory and having computer executable instructions for causing a computer to create a schedule for each patient including an examination by the nuclear medical examination apparatus and a medication accompanying the examination.*” Thus, in the present invention, the single nuclear medical examination scheduling program itself contains the instructions that cause the computer to create a schedule. In the prior art systems, on the other hand, the user enters the instructions through a graphic interface, as discussed in Applicant’s previous response. As such, in the prior art systems, the instructions are not included in the program itself.

The Examiner asserts that the recitation of “*a single nuclear medical examination*” has no patentable weight because the recitation occurs in the preamble of claim 1 (see page 5 of the Office Action). However, the body of the claim recites said examination, and this represents the examination by the nuclear medical examination apparatus included in the preamble. Therefore, this recitation breathes life into the claim and should be given patentable weight accordingly.

The Examiner also continues to assert that the recitation of “*to avoid overlapping in time between timing of the medication and examination for each patient*” is intended use (see page 8 of

the Office Action). However, as noted in Applicant's previous response, this limitation is not an intended use because it is directed to a distinct feature of the program of the present invention which requires processing and comparing of data by the computer. In particular, the processing unit of the computer searches for available vacancies, based on the various pieces of information, and arranges schedules for different patients in a way to avoid overlapping in time of the patients' medication and examination. This is a scheduling function of the computer's processing unit, and not an intended use. In other words, while it may be an intended use to create schedules, to avoid overlapping in time is a function of the computer's processing unit and not an intended use. Further, this limitation is not a function performed by a user, but rather, it is a function that the program of the present invention causes the computer to perform.

The present amendments to the claims clarify the parts for which overlapping in time is avoided by the present invention in creating a schedule. That is, overlapping in time between timing of medication for a certain patient and timing of medication for other patients is avoided, and overlapping in time between timing of examination for the certain patient and timing of examination for the other patients is avoided. Such a feature is not disclosed in or suggested by the cited references.

In the present invention, in order to avoid such overlapping in time, the computer creates a schedule automatically based on information, instead of a manual operation using a GUI. Therefore, the present invention is different in construction from White et al. and Kameda et al. and is not obvious therefrom. More specifically, referring to Reference figure 1, in the present invention it is assumed that instructions are given to examine four patients M1-M4 in the stated order, and that transmission data and emission data are separately collected for patient M1, while this data is simultaneously collected for patients M2-M4. It is also assumed that patients M1-M4 are to receive different types of examination, with time spans 33 having different time spans 35-38 of patterns FG and waiting times 39-42 (see paragraph [0058] and Figure 7 of the present Patent Application Publication No. 2004/0093252 A1).

The processing unit 13 arranges the examinations in the respective patterns FG, i.e. the timing of collecting transmission data TD and the timing of collecting emission data ED, in a way to avoid overlapping in time therebetween. At this time, overlapping in time between the timing of

medication according to the information on the contents of examinations and the order of examinations, and the timing of examination, is avoided while maintaining fixed waiting times 39-42 (see paragraph [0059] of the present Patent Application Publication).

A schedule for examining patients M1-M4 in the stated order to satisfy the above conditions is, for example, as shown in Reference figure 1 (see paragraph [0060] of the present Patent Application Publication). This technique is reflected in the claim limitation, “*creating an examination schedule to avoid overlapping in time between timing of medication for a certain patient and timing of medication for other patients and between timing of examination for the certain patient and timing of examination for the other patients, based on said information on contents of the examination and an order of examination and the waiting time.*”

Reference figure 2 shows an example of schedule creation for two patients M1 and M2. Arrangement Pattern 1 is an example of arrangement by the above technique, and is an acceptable arrangement. In Arrangement Pattern 2, while overlapping in time between examination ED for patient M1 and examination TD/ED for patient M2 is avoided, timing of medication IJ for patient M1 and timing of medication IJ for patient M2 overlap in time. This is an unacceptable arrangement. In Arrangement Pattern 3, while overlapping in time between timing of medication IJ for patient M1 and timing of medication IJ for patient M2 is avoided, examination ED for patient M1 and examination TD/ED for patient M2 overlap in time. This is also an unacceptable arrangement.

White et al. and Kameda et al. fail to disclose or suggest the feature that the computer makes an arrangement in a way, as noted above, to avoid overlapping in time between timing of medication for a certain patient and timing of medication for a different patient or patients and between timing of examination for the certain patient and timing of examination for the different patient or patients.

The Examiner asserts that it would have been obvious to one of ordinary skill in the art to combine White et al. and Kameda et al. to create an examination schedule based on information on contents of the examination, an order of examination and the waiting time (see page 4 of the Office Action). The system of White et al., however, does not search for available vacancies and requires an operator to determine vacancies visually and create schedules (see pages 9-10 of

Applicant's Response filed March 12, 2010 which explains in detail these features of White et al.).
That is, the system of White et al. is different in construction from the processing unit of the computer of the present invention.

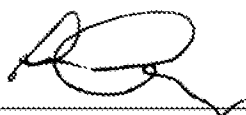
Accordingly, Applicant respectfully requests withdrawal of the present prior art rejection.

CONCLUSION

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the outstanding rejections. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Dated: November 8, 2010

Respectfully submitted,

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